Case serial number: 10/53/000 Class / Subclass(es): 435/6

Earliest Priority Filing Date: French 11/28/02

Format preferred for results: E-mail

Attachment: Yes.

Search Topic Information:

I need a structure search of the elected species Y2 in claim 43 and species Y'2 in claim 44. I've attached pages from the PgPub document - US2006/0160086 - which include images of the structure itself and the examples where the structure was synthesized. (I think the structure in the claims is too faint). I've also included the relevant claims (28, 35, 43, 44) and the abstract.

#### \*\*\*\*\* INVENTOR RESULTS \*\*\*\*\*

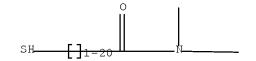
=> d his 117

(FILE 'HCAPLUS' ENTERED AT 17:08:33 ON 19 MAR 2008) 1 S ((L13-L16) AND L9) OR (L1 AND L9)

=> d que 117

1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20060160086/PN L1L2 STR



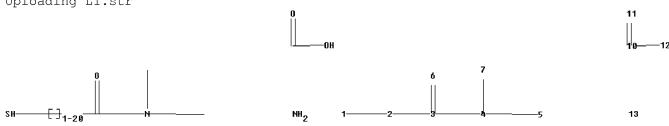


NH2

\_OH

Structure attributes must be viewed using STN Express query preparation:

Uploading L1.str



chain nodes :

1 2 3 4 5 6 7 10 11 12 13

chain bonds :

1-2 2-3 3-4 3-6 4-5 4-7 10-11 10-12

exact/norm bonds :

1-2 3-4 3-6 4-5 4-7

exact bonds :

2-3

normalized bonds :

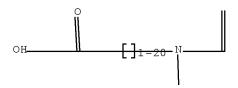
10-11 10-12

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS

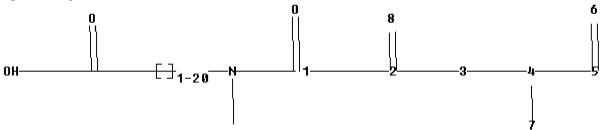
L464 SEA FILE=REGISTRY SSS FUL L2

L5 STR



Structure attributes must be viewed using STN Express query preparation:

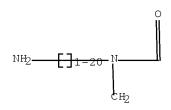
Uploading L2.str



chain nodes :
1 2 3 4 5 6 7 8
chain bonds :
1-2 2-3 2-8 3-4 4-5 4-7 5-6
exact/norm bonds :
3-4 4-5 4-7 5-6
exact bonds :
2-3
normalized bonds :
1-2 2-8

Match level:
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS

L6 STR



Structure attributes must be viewed using STN Express query preparation:

chain nodes :
1 2 3 4 5 6
chain bonds :
1-2 2-3 3-4 3-6 4-5
exact/norm bonds :
1-2 2-3 3-4 4-5
exact bonds :
3-6

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS

=> dup rem 117 127

FILE 'HCAPLUS' ENTERED AT 17:21:21 ON 19 MAR 2008
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FILE 'SCISEARCH' ENTERED AT 17:21:21 ON 19 MAR 2008 Copyright (c) 2008 The Thomson Corporation PROCESSING COMPLETED FOR L17 PROCESSING COMPLETED FOR L27

L28 9 DUP REM L17 L27 (3 DUPLICATES REMOVED)

> ANSWER '1' FROM FILE HCAPLUS ANSWERS '2-7' FROM FILE BIOSIS ANSWERS '8-9' FROM FILE PASCAL

=> d 128 1 ibib abs hitstr; d 128 ibib ab 2-9

L28 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:450626 HCAPLUS Full-text

DOCUMENT NUMBER: 141:33109

TITLE: Apparatus and process for the continuous detection of

an analyte using a trifunctional detection reagent

INVENTOR(S): Volland, Herve; Creminon, Christophe ; Neuburger, Laure Marie; Grassi,

Jacques

PATENT ASSIGNEE(S):

Commissariat a l'Energie Atomique, Fr.

SOURCE: Fr. Demande, 49 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. |       |      |      |     | KIND DATE |               |      |      | APPLICATION NO. |               |         |      |            | DATE |          |      |       |  |
|------------|-------|------|------|-----|-----------|---------------|------|------|-----------------|---------------|---------|------|------------|------|----------|------|-------|--|
| FR         | 2847  | 984  |      |     |           |               | 2004 | 0604 |                 | FR 2002-14959 |         |      |            |      | 20021128 |      |       |  |
| CA         | 2506  | 548  |      |     | A1        |               | 2004 | 0617 | CA 2003-2506548 |               |         |      |            |      | 20031128 |      |       |  |
| WO         | 2004  | 0512 | 71   |     | A1        |               | 2004 | 0617 | WO 2003-FR3521  |               |         |      |            |      | 20031128 |      |       |  |
|            | W:    | ΑE,  | AG,  | AL, | AM,       | ΑT,           | ΑU,  | ΑZ,  | BA,             | BB,           | BG,     | BR,  | BY,        | BZ,  | CA,      | CH,  | CN,   |  |
|            |       | CO,  | CR,  | CU, | CZ,       | DE,           | DK,  | DM,  | DZ,             | EC,           | EE,     | EG,  | ES,        | FI,  | GB,      | GD,  | GE,   |  |
|            |       | GH,  | GM,  | HR, | HU,       | ID,           | IL,  | IN,  | IS,             | JP,           | KΕ,     | KG,  | KP,        | KR,  | KΖ,      | LC,  | LK,   |  |
|            |       | LR,  | LS,  | LT, | LU,       | LV,           | MA,  | MD,  | MG,             | MK,           | MN,     | MW,  | MX,        | MZ,  | NI,      | NO,  | NZ,   |  |
|            |       | OM,  | PG,  | PH, | PL,       | PT,           | RO,  | RU,  | SC,             | SD,           | SE,     | SG,  | SK,        | SL,  | SY,      | ТJ,  | TM,   |  |
|            |       | TN,  | TR,  | TT, | TZ,       | UA,           | UG,  | US,  | UΖ,             | VC,           | VN,     | YU,  | ZA,        | ZM,  | ZW       |      |       |  |
|            | RW:   | GH,  | GM,  | ΚE, | LS,       | MW,           | MZ,  | SD,  | SL,             | SZ,           | TZ,     | UG,  | ZM,        | ZW,  | AM,      | ΑZ,  | BY,   |  |
|            |       | KG,  | KΖ,  | MD, | RU,       | ТJ,           | TM,  | ΑT,  | BE,             | BG,           | CH,     | CY,  | CZ,        | DE,  | DK,      | EE,  | ES,   |  |
|            |       | FΙ,  | FR,  | GB, | GR,       | HU,           | IE,  | ΙΤ,  | LU,             | MC,           | NL,     | PT,  | RO,        | SE,  | SI,      | SK,  | TR,   |  |
|            |       |      |      |     |           |               |      | GΑ,  |                 |               |         |      |            |      |          |      |       |  |
| ΑU         | 2003  | 2941 | 02   |     | A1        |               | 2004 | 0623 |                 | AU 2          | 003-    | 2941 | 02         |      | 2        | 0031 | 128   |  |
| EΡ         | 1567  | 865  |      |     | A1        |               | 2005 | 0831 |                 | EP 2          | 003-    | 7895 | 22         |      | 2        | 0031 | 128   |  |
| EP         | 1567  | 865  |      |     | В1        |               | 2006 | 1115 |                 |               |         |      |            |      |          |      |       |  |
|            | R:    | AT,  | BE,  | CH, | DE,       | DK,           | ES,  | FR,  | GB,             | GR,           | ΙΤ,     | LI,  | LU,        | NL,  | SE,      | MC,  | PT,   |  |
|            |       | ,    | ,    | ,   | ,         |               | ,    | MK,  | ,               | ,             |         | ,    | ,          | ,    |          |      |       |  |
| JP         | 2006  | 5083 |      |     |           |               |      |      |                 |               |         |      |            |      |          |      |       |  |
|            | 3454  |      |      |     |           |               |      | 1215 |                 |               |         |      |            |      |          | 0031 | 128   |  |
| _          | 2276  |      |      |     |           |               |      | 0616 |                 |               |         |      |            |      |          | 0031 | 128   |  |
| US         | 2006  | 1600 | 86   |     | A1        |               | 2006 | 0720 |                 | US 2          | 005-    | 5370 | 00         |      | 2        | 0051 | 220 < |  |
| DRIT       | Y APP | LN.  | INFO | .:  |           | FR 2002-14959 |      |      |                 |               | -       |      | A 20021128 |      |          |      |       |  |
|            |       |      |      |     |           |               |      |      | ,               | WO 2          | 003 - 3 | FR35 | 21         | ,    | W 2      | 0031 | 128   |  |

OTHER SOURCE(S): MARPAT 141:33109

GΙ

AΒ An analyte (a) contained in a fluid sample, such as water or biol. fluids, is detected by (1) saturation of a solid support with a trifunctional reagent (Y) having a luminescent group (L), a mol. (B) which can be an analog or a fragment of the analyte (a), and a functional group for the fixation of the reagent to the solid support, a receptor (Q) for the analyte (a) serving as a luminescence acceptor of the group (L) by forming (C) between the mol. (B) and the receptor (Q), (2) contacting the solid support obtained in step (1) with the fluid sample containing (a), (3) measuring the fluorescence intensity of the signal emitted by the group (L) which is proportional to the concentration of (a) in the sample, and (4) regenerating the solid support by contacting the solid support with receptor (Q). Steps (3) and (4) are carried out continuously. The solid support can be made of glass, plastics, ceramics, metals, or alloys as tubes, capillaries, plates, or beads. (C) can consist of peptide, nucleotide, glucoside, or hydrocarbon chains which can contain heteroatoms, such as N, O, S, and it has three chemical reactive functional groups F1, F2, and F3. The luminescent group (L) is covalently bound to F1 of the trifunctional reagent. (B) is reversibly and noncovalently bound to the receptor (Q) and covalently bound to F2 of the trifunctional reagent. F3 of the trifunctional reagent is used for the fixation of the complex to the solid support. The groups F1, F2, and F3 can be amino groups R-NH2, R-NH-, (R)3-N, R-NH-OR, and NH2-OR, an alc. group R-OH, a halogen-containing group R-X with Rrepresenting alkyl, aryl, vinyl, or allyl groups. The luminescent group can be fluorescein, rhodamine and their derivs., DAPI, acridine, fluorescent dyes of reactive amines, BODIPY, Cascade Blue, Cy2, Cy3, Cy3.5, Cy5, Cy5.5, Cy7, DABCYL, EDANS, eosine, erythrosine, 6-Fam, and Texas Red. The receptor can be an antibody (entire, fragment, or recombinant), a biol. receptor, nucleic acids, peptide nucleic acids, lectin, transport proteins, chelates, or synthetic receptors. The receptor has a greater affinity to (a) than to (B). The acceptor (Q) can be the same fluorescent compds. as for (L), or nonfluorescent compds., such as Black Hole Quencher 1, 2, and 3, Nanogold particles, Eclipse Dark Quencher, Elle Quencher, malachite green, the dyes QSY7, QSY9, and QSY21. (B) can be peptides, proteins, oligonucleotides, sugars, and peptide nucleic acids. The skeleton of the trifunctional reagent (Y) can have the following general structures: H2N-(CH2)m-N[(CH2)n-SH](CH2)p-COOH (Y1), H2N-(CH2)m-N[C(0)(CH2)n-SH](CH2)p-COOH(Y2), and (I)(Y3). Preferably, the skeleton of the trifunctional reagent (Y) can have the following structures: H2N-(CH2)2-N[(CH2)3-SH](CH2)2-COOH (Y'1), H2N-(CH2)2-N[C(0)(CH2)2-SH](CH2)2-COOH(Y'2), and I with n=2, m=3, and p=3 (Y'3). A The device used for the fluorescence detection of the analyte (a) can be used in lakes, rivers, swimming pools, factories, purification plants, ventilation and climate control systems.

IT 697763-14-7P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (Y'2; continuous detection of analyte using trifunctional detection reagent)

RN 697763-14-7 HCAPLUS

CN  $\beta$ -Alanine, N-(2-aminoethyl)-N-(3-mercapto-1-oxopropyl)- (CA INDEX NAME)

$$\begin{array}{c} \operatorname{CH2-CH2-NH2} \\ \operatorname{HO_2C-CH_2-CH_2-N-C-CH_2-CH_2-SH} \end{array}$$

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

DUPLICATE 2

ACCESSION NUMBER: 2001:145799 BIOSIS Full-text

DOCUMENT NUMBER: PREV200100145799

TITLE: Use of free radical chemistry in an immunometric assay for

17beta-estradiol.

AUTHOR(S): Buscarlet, Laure; Volland, Herve; Dupret-Carruel,

Jacqueline; Jolivet, Michel; Grassi, Jacques; Creminon, Christophe; Taran, Frederic; Pradelles,

Philippe [Reprint author]

CORPORATE SOURCE: Laboratoire d'Etudes Radioimmunologiques, SPI/DRM/DSV,

CEA/Saclay, CEA, 91191, Gif-sur-Yvette Cedex, France

philippe.pradelles@cea.fr

SOURCE: Clinical Chemistry, (January, 2001) Vol. 47, No. 1, pp.

102-109. print.

CODEN: CLCHAU. ISSN: 0009-9147.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 21 Mar 2001

Last Updated on STN: 15 Feb 2002

AΒ Background: We wished to develop an enzyme immunometric assay for 17betaestradiol (E2) in human serum using solid-phase immobilized epitope immunoassay (SPIE-IA) technology and free radical chemistry. Methods: We used an anti-estradiol monoclonal antibody as capture antibody and Fenton-like reagents to cross-link it to E2. The same antibody, labeled with acetylcholinesterase, was used for detection. Serum was diluted 10-fold before assay. Results: After correction by the dilution factor, the detection limit was 5 ng/L for human serum and intra-and interassay CVs were <7% and 15%, respectively, at concentrations of 169-2845 ng/L. No cross-reactivity was seen with other natural steroids. In comparison with a competitive commercial RIA performed on 88 undiluted human sera, the slope (SD) of the regression line was 1.05 (+- 0.02) and the intercept was 47 (+-27) ng/L (Sy/x = 186 ng/L) at concentrations of 20-5000 ng/L (r2 = 0.97). Conclusions: The use of Fenton-like chemistry in SPIE-IA technology allows a sensitive measurement of E2 in human serum and could be a new approach for the development of sensitive immunoassays.

L28 ANSWER 3 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:472617 BIOSIS Full-text

DOCUMENT NUMBER: PREV200000472617

TITLE: Quantitative measurement of bitagged recombinant proteins

using an immunometric assay: Application to an

anti-substance P recombinant antibody.

AUTHOR(S): Boquet, Didier [Reprint author]; Creminon,

Christophe; Clement, Gilles; Frobert, Yveline; Nevers,

Marie-Claire; Essono, Sosthene; Grassi, Jacques

CORPORATE SOURCE: Service de Pharmacologie et d'Immunologie, DRM/DSV,

CEA-Saclay, 91191, Gif sur Yvette Cedex, France

SOURCE: Analytical Biochemistry, (September 10, 2000) Vol. 284, No.

2, pp. 221-230. print.

CODEN: ANBCA2. ISSN: 0003-2697.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 1 Nov 2000

Last Updated on STN: 10 Jan 2002

We have developed two different immunometric assays to directly quantify both AB the total and the active fractions of a recombinant antibody (single chain fragment variable, or ScFv) as obtained in a crude extract from an Escherichia coli expression system. For total determination, the assay is based on the simultaneous recognition of two different peptide Tag sequences (Ha-Tag and Myc-Tag) at each of the N- and C-terminal extremities of the recombinant protein. A monoclonal antibody (mAb 12CA5, directed against Ha-Tag), coated on microtiter plates, is used for capture, and the mAb 9E10 (directed against Myc-Tag), labeled with acetylcholinesterase (AChE, EC 3.1.1.7), acts as tracer. In parallel, for the determination of the active fraction, the capture is performed using microtiter plates coated with the antigen, while solid- phase-immobilized ScFv is measured using the same 9E10 tracer mAb. A synthetic peptide in which the two Tag sequences were joined was used as a standard, thus avoiding the laborious purification of a recombinant protein as reference. The method was applied to the direct measurement, in periplasmic extracts, of the total and active fractions of an ScFv produced at different induction temperatures.

L28 ANSWER 4 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:44879 BIOSIS Full-text

DOCUMENT NUMBER: PREV20000044879

TITLE: A solid-phase immobilized epitope

immunoassay (SPIE-IA) permitting very sensitive and specific measurement of angiotensin II in plasma.

AUTHOR(S): Volland, Herve; Pradelles, Philippe; Ronco,

Pierre; Azizi, Michel; Simon, Dominique; Creminon,

Christophe; Grassi, Jacques [Reprint author]

CORPORATE SOURCE: Service de Pharmacologie et d'Immunologie, Departement de

Recherche Medicale, CEA, CE Saclay, Batiment 136, 91191,

Gif sur Yvette Cedex, France

SOURCE: Journal of Immunological Methods, (Aug. 31, 1999) Vol. 228,

No. 1-2, pp. 37-47. print.

CODEN: JIMMBG. ISSN: 0022-1759.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 26 Jan 2000

Last Updated on STN: 31 Dec 2001

AB We have developed a new enzyme immunometric assay for angiotensin II (AII) based on SPIE-IA technology (solid-phase immobilized epitope-immunoassay). A monoclonal antibody with optimal properties (mAb3 131) was selected from a series of 19 anti-AII mAbs. The mAb had to be purified from ascitic fluid in a specific manner in order to remove endogenous AII from the antibody-binding sites. We established a sensitive (minimum detectable concentration 0.5 pg/ml) and precise (CV below 15% in the 2-100 pg/ml range) SPIE-IA. Using different AII-related peptides, we observed that this new assay has a

specificity profile that compares favourably with the corresponding competitive immunoassay. We have used the assay to measure AII in 42 plasma samples, and demonstrated a good correlation with values obtained using a commercial radioimmunoassay. Assay specificity was supported by HPLC fractionation experiments, confirming the absence of interference induced by endogenous AII-related products.

L28 ANSWER 5 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1996:509231 BIOSIS Full-text

DOCUMENT NUMBER: PREV199699231587

TITLE: Two different approaches for developing immunometric assays

of haptens.

AUTHOR(S): Grassi, Jacques [Reprint author]; Creminon,

Christophe; Frobert, Yveline; Etiene, Emmanuelle; Ezan, Eric; Volland, Merve; Pradelles, Philippe

CORPORATE SOURCE: CEA, Serv. Pharmacol. d'Immunol., DRM, CE/Saclay, 91191 Gif

sur Yvette Cedex, France

SOURCE: Clinical Chemistry, (1996) Vol. 42, No. 9, pp. 1532-1536.

CODEN: CLCHAU. ISSN: 0009-9147.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 14 Nov 1996

Last Updated on STN: 14 Nov 1996

To improve immunoassays of small haptens, we developed two different AΒ approaches for their measurement in a noncompetitive format. We first devised two-site immunometric assays for small peptides (8-11 amino acids) by selecting two sets of antibodies specifically directed against C- and Nterminal moieties of the peptides. In each case, assay sensitivity improved substantially over that of the corresponding competitive assays. More interestingly, all of these new immunometric assays were much more specific than the competitive assays. In a second approach, we developed a new procedure, solid-phase-immobilized epitope immunoassay (SPIE-IA), in which a single monoclonal antibody uses the same epitope for capture and tracer binding and the hapten is covalently cross-linked to solid-phase proteins. date, SPIE-IA have been successfully applied to the determination of haptens bearing primary amino groups, including substance P, thyroxine, leukotriene C4, endothelin, and angiotensin II. In each case, assay sensitivity was significantly improved.

L28 ANSWER 6 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1997:66110 BIOSIS Full-text

DOCUMENT NUMBER: PREV199799365313

TITLE: Preferential labeling of alpha-amino N-terminal groups in

peptides by biotin: Application to the detection of

specific anti-peptide antibodies by enzyme immunoassays.

AUTHOR(S): Selo, I. [Reprint author]; Negroni, L.; Creminon,

C.; Grassi, J.; Wal, J. M.

CORPORATE SOURCE: Lab. Assoc. INRA-CEA Immuno Allergie Alimentaire, SPI Bat

136, CE-Saclay, 91191 Gif sur Yvette Cedex, France

SOURCE: Journal of Immunological Methods, (1996) Vol. 199, No. 2,

pp. 127-138.

CODEN: JIMMBG. ISSN: 0022-1759.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 11 Feb 1997

Last Updated on STN: 11 Feb 1997

AB Experimental conditions (pH 6.5, 24 h reaction, peptide:biotin ratio 1:5) were defined for preferential incorporation of the biotin molecule in the N-

terminal alpha-amino group of peptides. This strategy could be helpful in numerous applications when an entire peptide chain must remain accessible for antibody or receptor binding. We illustrate this advantage in a solid-phase enzyme immunoassay designed to detect antibodies specific for bovine beta-lactoglobulin present in rabbit or human sera. This test involves synthetic peptides biotinylated in different positions and immobilized on a solid phase. The use of biotin/streptavidin interactions permitted more efficient detection of specific anti-peptide antibodies than solid phases prepared using conventional passive-adsorption techniques. The highest levels of antibody binding were measured when biotinylation occurred at the N-terminal extremity of immobilized peptides.

L28 ANSWER 7 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:157585 BIOSIS Full-text

DOCUMENT NUMBER: PREV199598171885

TITLE: Immunological studies of human constitutive cyclooxygenase

(COX-1) using enzyme immunometric assay.

AUTHOR(S): Creminon, Christophe [Reprint author]; Frobert,

Yveline; Habib, Aida; Maclouf, Jacques; Pradelles,

Philippe; Grassi, Jacques

CORPORATE SOURCE: CEA, Serv. Pharmacol. d'Immunol., DRIPP, Cent. d'Etudes

SACLAY, 91191 Gif-sur-Yvette Cedex, France

SOURCE: Biochimica et Biophysica Acta, (1995) Vol. 1254, No. 3, pp.

333-340.

CODEN: BBACAQ. ISSN: 0006-3002.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 11 Apr 1995

Last Updated on STN: 23 May 1995

AB Polyclonal antisera and six distinct monoclonal antibodies (mAbs) were raised against constitutive cyclooxygenase (COX-1) purified from ram seminal vesicles. Immunoblotting experiments revealed that the polyclonal antisera and 4 of the mAbs strongly recognized human  ${\tt COX}$  in platelet extracts. Different two-site immunometric assays of ram COX-1 were established using different combinations of mAbs. The assays were performed in 96-well microliter plates coated with one mAb, with another mAb (covalently labeled with acetylcholinesterase (AChE)) as tracer. One combination (solid phase CX-101 + CX-105-AChE) exhibited the best sensitivity, with significant detection of concentrations as low as 23 pg/ml (0.3 fmol/ml of sheep COX-1). Unfortunately, this assay poorly cross-reacted with human COX-1 from platelet extracts. Another combination (solid phase CX-111 + CX-110-AChE) exhibited good recognition of human COX-1 but poor cross-reactivity with ram COX-1. Finally, purified anti-COX-1 IgG coated and CX-110-AChE were chosen as the best compromise since both good sensitivity (limit of detection, 113 pg/ml of ram COX-1) and significant cross-reactivity between COX-1 from both species were observed. In parallel, polyclonal antibodies were raised in rabbits against a peptide of 12 amino acids corresponding to the aminoterminal part of human COX-1. These polyclonal antibodies were affinity-purified and used in development of another two-site immunometric assay of COX-1 with CX-110-AChE as tracer. These two assays were used to analyze the COX-1 content of human platelets and cultured human umbilical vein cells (HUVEC). The results obtained with each assay were compared in terms of sensitivity and specificity. The validity of both assays was checked by analyzing platelets and HUVEC extracts previously fractionated by molecular sieve chromatography.

L28 ANSWER 8 OF 9 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN DUPLICATE 1

ACCESSION NUMBER: 2005-0203414 PASCAL <u>Full-text</u>

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TITLE (IN ENGLISH): Solid-phase immobilized tripod for

fluorescent renewable immunoassay. A concept

for continuous monitoring of an immunoassay including

a regeneration of the solid phase

AUTHOR: VOLLAND Herve; NEUBURGER Laure-Marie ; SCHULTZ Emmanuelle; GRASSI Jacques;

PERRAUT François; CREMINON Christophe

CORPORATE SOURCE: CEA, Laboratoire des Systemes de Lecture pour la

Biologie, LETI/DSIS/SSBS/SLB, 17 Avenue des Martyrs, 38054 Grenoble, France; CEA, Laboratoire d'Etudes et de Recherche en Immunoanalyse, DRM/SPI, Batiment 136,

CEA-Saclay, 91191 Gif sur Yvette, France

SOURCE: Analytical chemistry: (Washington, DC), (2005),

77(6), 1896-1904, 33 refs.

ISSN: 0003-2700 CODEN: ANCHAM

DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States

LANGUAGE: English

AVAILABILITY: INIST-120B, 354000125086860480

A new concept of immunoassay based on the use of a trifunctional reagent (tripod) and fluorescence resonance energy transfer (FRET) phenomenon is described. This procedure involves differential steps: (1) the tripod bearing (i) a fluorophore, (ii) a molecule structurally close to the target, and (iii) a linker reacts with the solid phase; (2) the solid phase is further activated with an anti-target antibody labeled with a quencher molecule, generating the decrease of the fluorophore emission via FRET; (3) FRET being distance dependent, the presence of the target by competing with the tripod for binding the quencher-labeled antibody leads to a rise of the fluorescence signal; (4) the solid phase is reactivated simply, by adding the quencherlabeled antibody. This method was evaluated in microtiter plates using the susbtance P as model while fluorescein and TAMRA were used as donor and acceptor, respectively. Results clearly illustrated the interest of the method, by allowing (i) a simple regeneration procedure, without requiring any drastic treatment, (ii) a direct fluorescence measurement onto the solid support, leading to a localized and cumulative signal, (iii) an increase of the signal when detecting the target, unlike classical competitive immunoassays, and (iv) a real-time monitoring of the competition and regeneration steps.

L28 ANSWER 9 OF 9 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on

STN

ACCESSION NUMBER: 2005-0000296 PASCAL Full-text

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reserved.

TITLE (IN ENGLISH): Recent developments for SPIE-IA, a new sandwich

immunoassay format for very small molecules

Solid Phase Assays for Molecules with Biopharmaceuticals Importance

AUTHOR: VOLLAND Herve; PRADELLES Philippe; TARAN

Frederic; BUSCARLET Laure; CREMINON Christophe

KARAMANOS Nikos K. (ed.)

CORPORATE SOURCE: CEA, Service de Pharmacologie et d'Immunologie,

DRM/DSV, CEA/Saclay, 91191 Gif-sur-Yvette, France; CEA, Service des Molecules Marquees et de Chimie

Bioorganique, DBJC/DSV, CEA/Saclay, 91191

Gif-sur-Yvette, France; R&D Department, Technical

Center, Diffchamb SA, 8 rue St Jean de Dieu, 69007

Lyon, France

Department of Chemistry, University of Patras, 261 10

Patras, Greece

SOURCE: Journal of pharmaceutical and biomedical analysis,

(2004), 34(4), 737-752, 51 refs. ISSN: 0731-7085 CODEN: JPBADA

DOCUMENT TYPE:

BIBLIOGRAPHIC LEVEL:

COUNTRY:

LANGUAGE:

Journal

Analytic

Netherlands

English

AVAILABILITY: INIST-19962, 354000116928380020

AB Recent publications describing new elegant approaches to assay small analytes using noncompetitive format were briefly reviewed. Among these methods, we have developed a new protocol, named SPIE-IA, which involves a cross-linking step achieved using chemical hombifunctional reagents, UV irradiation or free radicals. This new method proved to be useful to detect naturally occurring analytelantibody complexes or to protect the analytes against degradation by peptidases. On the other hand, SPIE-IA could allow to study the adverse biological effects of UV and some aspects of free radical chemistry or to evaluate the antioxidant activity of molecules.

## \*\*\*\*\* QUERY RESULTS \*\*\*\*\*

=> d his 19

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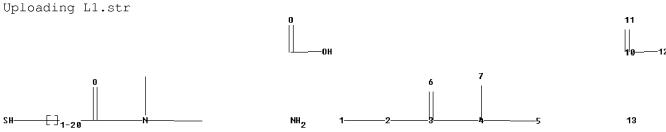
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STR L2



Structure attributes must be viewed using STN Express query preparation:



chain nodes :

1 2 3 4 5 6 7 10 11 12 13

chain bonds :

1-2 2-3 3-4 3-6 4-5 4-7 10-11 10-12

exact/norm bonds :

1-2 3-4 3-6 4-5 4-7

exact bonds :

2-3

normalized bonds :

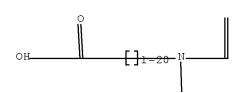
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Match level:

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 10:CLASS 11:CLASS

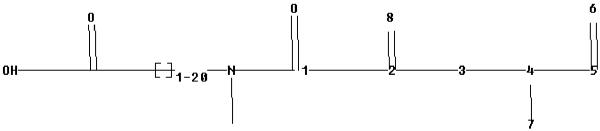
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L5 STR



Structure attributes must be viewed using STN Express query preparation:

Uploading L2.str



chain nodes :

1 2 3 4 5 6 7 8

chain bonds :

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exact/norm bonds :

3-4 4-5 4-7 5-6

exact bonds :

2-3

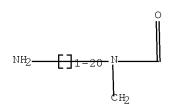
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1-2 2-8

Match level :

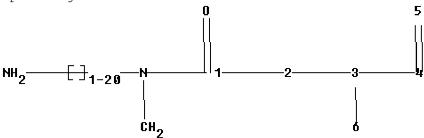
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L6 STR



Structure attributes must be viewed using STN Express query preparation:





chain nodes : 1 2 3 4 5 6 chain bonds :

1-2 2-3 3-4 3-6 4-5

exact/norm bonds: 1-2 2-3 3-4 4-5 exact bonds:

3-6

Match level:

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS

L8 14 SEA FILE=REGISTRY SUB=L4 SSS FUL (L5 OR L6)

L9 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L8

=> d 19 1-8 ibib ed abs hitstr hitind

L9 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:450626 HCAPLUS Full-text

DOCUMENT NUMBER: 141:33109

TITLE: Apparatus and process for the continuous detection of

an analyte using a trifunctional detection reagent

INVENTOR(S): Volland, Herve; Creminon, Christophe; Neuburger, Laure

Marie; Grassi, Jacques

PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.

SOURCE: Fr. Demande, 49 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.     | KIND DATE      | APPLICATION NO.          | DATE            |
|----------------|----------------|--------------------------|-----------------|
|                |                |                          |                 |
| FR 2847984     | A1 2004060     | 94 FR 2002-14959         | 20021128        |
| CA 2506548     | A1 2004061     | .7 CA 2003-2506548       | 20031128        |
| WO 2004051271  | A1 2004061     | .7 WO 2003-FR3521        | 20031128        |
| W: AE, AG, AL, | AM, AT, AU, AZ | I, BA, BB, BG, BR, BY, I | BZ, CA, CH, CN, |
| CO, CR, CU,    | CZ, DE, DK, DN | I, DZ, EC, EE, EG, ES, I | FI, GB, GD, GE, |
| GH, GM, HR,    | HU, ID, IL, IN | I, IS, JP, KE, KG, KP, I | KR, KZ, LC, LK, |
| LR, LS, LT,    | LU, LV, MA, MI | ), MG, MK, MN, MW, MX, I | MZ, NI, NO, NZ, |
| OM, PG, PH,    | PL, PT, RO, RU | J, SC, SD, SE, SG, SK, S | SL, SY, TJ, TM, |

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TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003294102
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                               20040623 AU 2003-294102
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                                20061115
                         В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006508357
                         Т
                               20060309
                                           JP 2004-556436
                                                                  20031128
                                           AT 2003-789522
     AT 345498
                          Τ
                                20061215
                                                                  20031128
     ES 2276149
                         Т3
                                20070616
                                           ES 2003-789522
                                                                  20031128
     US 2006160086
                         Α1
                               20060720
                                           US 2005-537000
                                                                  20051220
                                           FR 2002-14959
PRIORITY APPLN. INFO.:
                                                              A 20021128
                                           WO 2003-FR3521
                                                              W 20031128
```

OTHER SOURCE(S): MARPAT 141:33109

ED Entered STN: 04 Jun 2004

GΙ

$$CH2 = COOH$$

$$CH2 = N = C = S$$

$$CH2 = N$$

$$CH2 = N$$

AΒ An analyte (a) contained in a fluid sample, such as water or biol. fluids, is detected by (1) saturation of a solid support with a trifunctional reagent (Y) having a luminescent group (L), a mol. (B) which can be an analog or a fragment of the analyte (a), and a functional group for the fixation of the reagent to the solid support, a receptor (Q) for the analyte (a) serving as a luminescence acceptor of the group (L) by forming (C) between the mol. (B) and the receptor (Q), (2) contacting the solid support obtained in step (1) with the fluid sample containing (a), (3) measuring the fluorescence intensity of the signal emitted by the group (L) which is proportional to the concentration of (a) in the sample, and (4) regenerating the solid support by contacting the solid support with receptor (Q). Steps (3) and (4) are carried out continuously. The solid support can be made of glass, plastics, ceramics, metals, or alloys as tubes, capillaries, plates, or beads. (C) can consist of peptide, nucleotide, glucoside, or hydrocarbon chains which can contain heteroatoms, such as N, O, S, and it has three chemical reactive functional groups F1, F2, and F3. The luminescent group (L) is covalently bound to F1 of the trifunctional reagent. (B) is reversibly and noncovalently bound to the receptor (Q) and covalently bound to F2 of the trifunctional reagent. F3 of the trifunctional reagent is used for the fixation of the complex to the solid support. The groups F1, F2, and F3 can be amino groups R-NH2, R-NH-, (R)3-N, R-NH-OR, and NH2-OR, an alc. group R-OH, a halogen-containing group R-X with R representing alkyl, aryl, vinyl, or allyl groups. The luminescent group can be fluorescein, rhodamine and their derivs., DAPI, acridine, fluorescent dyes

of reactive amines, BODIPY, Cascade Blue, Cy2, Cy3, Cy3.5, Cy5, Cy5.5, Cy7, DABCYL, EDANS, eosine, erythrosine, 6-Fam, and Texas Red. The receptor can be an antibody (entire, fragment, or recombinant), a biol. receptor, nucleic acids, peptide nucleic acids, lectin, transport proteins, chelates, or synthetic receptors. The receptor has a greater affinity to (a) than to (B). The acceptor (Q) can be the same fluorescent compds. as for (L), or nonfluorescent compds., such as Black Hole Quencher 1, 2, and 3, Nanogold particles, Eclipse Dark Quencher, Elle Quencher, malachite green, the dyes OSY7, OSY9, and OSY21. (B) can be peptides, proteins, oligonucleotides, sugars, and peptide nucleic acids. The skeleton of the trifunctional reagent (Y) can have the following general structures: H2N-(CH2)m-N[(CH2)n-SH](CH2)p-COOH (Y1), H2N-(CH2)m-N[C(0)(CH2)n-SH](CH2)p-COOH(Y2), and (I)(Y3). Preferably, the skeleton of the trifunctional reagent (Y) can have the following structures: H2N-(CH2)2-N[(CH2)3-SH](CH2)2-COOH (Y'1), H2N-(CH2)2-N[C(0)(CH2)2-SH](CH2)2-COOH(Y'2), and I with n=2, m=3, and p=3 (Y'3). A The device used for the fluorescence detection of the analyte (a) can be used in lakes, rivers, swimming pools, factories, purification plants, ventilation and climate control systems.

IT 697763-14-7P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(Y'2; continuous detection of analyte using trifunctional detection reagent)

RN 697763-14-7 HCAPLUS

CN  $\beta$ -Alanine, N-(2-aminoethyl)-N-(3-mercapto-1-oxopropyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{CH2-CH2-NH2} \\ \text{HO2C-CH2-CH2-CH2-CH2-SH} \\ \end{array}$$

IC ICM G01N033-58 ICS C07K017-00

CC 80-6 (Organic Analytical Chemistry)
Section cross-reference(s): 9, 59, 61, 73

IT 697763-14-7P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(Y'2; continuous detection of analyte using trifunctional detection reagent)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:353017 HCAPLUS Full-text

DOCUMENT NUMBER: 129:40146

TITLE: Detection of antagonist-dependent GPIIb/IIIa receptor

antibodies

INVENTOR(S): Bednar, Bohumil; Gould, Robert J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Bednar, Bohumil; Gould, Robert

J.

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT N       |               | KIND DATE |     |         | APPI | ICATI   | ON NO. | DATE    |          |        |       |    |  |
|----------------|---------------|-----------|-----|---------|------|---------|--------|---------|----------|--------|-------|----|--|
| WO 98228       | 21<br>CA, JP, |           | A1  | 1998(   | )528 | WO 1    | .997-U | S20954  | 19971117 |        |       |    |  |
|                |               |           | DE, | DK, ES, | FI,  | FR, GB, | GR,    | IE, IT, | LU, M    | C, NL, | PT, S | SE |  |
| CA 22716       | 84            |           | A1  | 19980   | 0528 | CA 1    | 997-2  | 271684  |          | 19971  | 117   |    |  |
| EP 93990       | 0             |           | A1  | 1999(   | 0908 | EP 1    | 997-9  | 47553   | 19971117 |        |       |    |  |
| R: 2           | AT, BE,       | CH,       | DE, | DK, ES, | FR,  | GB, GR, | ΙΤ,    | LI, LU, | NL, S    | E, PT, | IE, F | ŦΙ |  |
| JP 20015       | 04584         |           | T   | 20010   | 0403 | JP 1    | 998-5  | 23783   | 19971117 |        |       |    |  |
| PRIORITY APPLI | N. INFO.      | . :       |     |         |      | US 1    | 996-3  | 1661P   | P        | 19961  | 121   |    |  |
|                |               |           |     |         |      | US 1    | 997-3  | 5461P   | P        | 19970  | 114   |    |  |
|                |               |           |     |         |      | GB 1    | 997-2  | 822     | A        | 19970  | 212   |    |  |
|                |               |           |     |         |      | GB 1    | 997-5  | 856     | A        | 19970  | 321   |    |  |
|                |               |           |     |         |      | WO 1    | .997-U | S20954  | W        | 19971  | 117   |    |  |

Entered STN: 11 Jun 1998 ED

AΒ The present invention is a method for identifying a patient at risk to developing fibrinogen receptor antagonist-induced thrombocytopenia. The method comprises incubating patient plasma with a GPIIb/IIIa receptor:GPIIb/IIIa receptor antagonist complex to form a GPIIb/IIIa receptor:GPIIb/IIIa receptor antagonist:plasma antibody complex, incubating the GPIIb/IIIa receptor:GPIIb/IIIa receptor antagonist:plasma antibody complex with a secondary anti-human detectable antibody to form a GPIIb/IIIa receptor:GPIIb/IIIa receptor antagonist:plasma antibody:secondary anti-human detectable antibody complex, and detecting the presence of the secondary antihuman detectable antibody in the GPIIb/IIIa receptor:GPIIb/IIIa receptor antagonist:plasma antibody:secondary anti-human detectable antibody complex.

197392-29-3 197392-30-6 197392-31-7 ΙT

197392-32-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (detection of antagonist-dependent GPIIb/IIIa receptor antibodies for diagnosis of fibrinogen receptor antagonist-induced thrombocytopenia)

197392-29-3 HCAPLUS RN

L-Cysteinamide, N2-(1-iminoethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-CN  $L-\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 197392-30-6 HCAPLUS

CN L-Valinamide, N2-(1-iminoethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L-  $\alpha\text{-aspartyl-L-tryptophyl-L-phenylalanyl-3-mercapto-}$  (QCI) (CA INDEX NAME)

Absolute stereochemistry.

RN 197392-31-7 HCAPLUS

CN L-Valinamide, N2-(iminophenylmethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl-3-mercapto-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

RN 197392-32-8 HCAPLUS

CN L-Cysteinamide, N2-(iminophenylmethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IC ICM G01N033-53

ICS G01N033-567

CC 15-3 (Immunochemistry)

IT 105806-65-3 142373-60-2 144412-49-7 169237-80-3 176022-59-6 197392-29-3 197392-30-6 197392-31-7

197392-32-8 208260-66-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (detection of antagonist-dependent GPIIb/IIIa receptor antibodies for

diagnosis of fibrinogen receptor antagonist-induced thrombocytopenia)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:655453 HCAPLUS Full-text

DOCUMENT NUMBER: 127:303338

TITLE: Composition and method for reducing the risk of acute

coronary ischemic syndrome

INVENTOR(S): Gould, Robert J.; Hartman, George D.; Nichtberger,

Steven A.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Gould, Robert J.; Hartman,

George D.; Nichtberger, Steven A.

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA      | PATENT NO.             |             |     |     |             | KIND DATE |              |                | APPLICATION NO. |      |       |       |     |          | DATE |      |     |  |
|---------|------------------------|-------------|-----|-----|-------------|-----------|--------------|----------------|-----------------|------|-------|-------|-----|----------|------|------|-----|--|
| <br>WO  | 9735                   | <br>615     |     |     | A1 19971002 |           |              | WO 1997-US4739 |                 |      |       |       |     | 19970324 |      |      |     |  |
|         | W:                     | AL,         | AM, | ΑU, | AZ,         | BA,       | BB,          | BG,            | BR,             | BY,  | CA,   | CN,   | CU, | CZ,      | EE,  | GE,  | HU, |  |
|         |                        | IL,         | IS, | JP, | KG,         | KR,       | KΖ,          | LC,            | LK,             | LR,  | LT,   | LV,   | MD, | MG,      | MK,  | MN,  | MX, |  |
|         |                        | NO,         | NΖ, | PL, | RO,         | RU,       | SG,          | SI,            | SK,             | ТJ,  | TM,   | TR,   | TT, | UA,      | US,  | UΖ,  | VN, |  |
|         |                        | YU,         | ΑM, | ΑZ, | BY,         | KG,       | KΖ,          | MD,            | RU,             | ТJ,  | TM    |       |     |          |      |      |     |  |
|         | RW:                    | GH,         | ΚE, | LS, | MW,         | SD,       | SZ,          | UG,            | ΑT,             | BE,  | CH,   | DE,   | DK, | ES,      | FI,  | FR,  | GB, |  |
|         |                        | GR,         | IE, | ΙT, | LU,         | MC,       | NL,          | PT,            | SE,             | BF,  | ВJ,   | CF,   | CG, | CI,      | CM,  | GA,  | GN, |  |
|         |                        | ${ m ML}$ , | MR, | ΝE, | SN,         | TD,       | ΤG           |                |                 |      |       |       |     |          |      |      |     |  |
| AU      | 9722                   | 196         |     |     | Α           |           | 1997         | 1017           |                 | AU 1 | 997-  | 2219  | 6   |          | 1    | 9970 | 324 |  |
| PRIORIT | PRIORITY APPLN. INFO.: |             |     |     |             |           |              |                | 1               | US 1 | 996-  | 1421  | 6P  |          | P 1  | 9960 | 327 |  |
|         |                        |             |     |     |             |           | GB 1996-7513 |                |                 |      |       |       | A 1 | 9960     | 411  |      |     |  |
|         |                        |             |     |     |             |           |              |                | 1               | WO 1 | 997-1 | JS47. | 39  | 1        | W 1  | 9970 | 324 |  |

ED Entered STN: 15 Oct 1997

In patients at risk for acute coronary ischemic syndrome during angioplasty, AB the risk is reduced by administering a combination of a platelet glycoprotein IIb/IIIa (fibrinogen receptor) antagonist and a platelet integrin  $\alpha v \beta 3$ (vitronectin receptor) antagonist. The combination can prevent platelet thrombosis, thromboembolism, and reocclusion after angioplasty or coronary artery bypass procedures, and is also useful in treatment of unstable angina and prevention of myocardial infarction. Thus, patients with acute coronary ischemic syndrome who had received coronary revascularization with angioplasty, aspirin (325 mg/day), and heparin by i.v. bolus were administered the glycoprotein IIb/IIIa antagonist, tirofiban, and the integrin  $\alpha v \beta 3$ antagonist, 7-[[(6-amino-2-pyridinyl)amino]carbonyl]-4-methyl-3-oxo-2,3,4,5tetrahydro-1H-1,2-benzodiazepine-2-acetic acid in amts. sufficient to achieve plasma levels of 40-60 ng/mL and 40-60 ng/mL, resp., for 24 h following angioplasty. Tablet and i.v. formulations of the above combination are described.

IT 197392-29-3 197392-30-6 197392-31-7 197392-32-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(glycoprotein IIb/IIIa antagonist; composition and method for reducing risk of acute coronary ischemic syndrome)

RN 197392-29-3 HCAPLUS

CN L-Cysteinamide, N2-(1-iminoethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 197392-30-6 HCAPLUS

CN L-Valinamide, N2-(1-iminoethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L-  $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl-3-mercapto- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 197392-31-7 HCAPLUS

CN L-Valinamide, N2-(iminophenylmethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl-3-mercapto-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ &$$

PAGE 2-A

RN 197392-32-8 HCAPLUS

CN L-Cysteinamide, N2-(iminophenylmethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IC ICM A61K039-395

CC 1-8 (Pharmacology)

Section cross-reference(s): 63

IT 105806-65-3 142373-60-2, Tirofiban hydrochloride 144412-49-7 169237-80-3 197392-29-3 197392-30-6 197392-31-7 197392-32-8 197521-03-2 197521-04-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(glycoprotein IIb/IIIa antagonist; composition and method for reducing risk of acute coronary ischemic syndrome)

L9 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:650267 HCAPLUS Full-text

DOCUMENT NUMBER: 127:303337

TITLE: Method for inhibiting platelet aggregation and clot

formation

INVENTOR(S): Gould, Robert J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Gould, Robert J.

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|      | PATENT NO. |      |         |      |     |             | KIND DATE |      |                | APPLICATION NO. |      |      |      |          |     | DATE |      |     |  |
|------|------------|------|---------|------|-----|-------------|-----------|------|----------------|-----------------|------|------|------|----------|-----|------|------|-----|--|
|      | WO         | 9735 | <br>579 |      |     | A1 19971002 |           |      | WO 1997-US4631 |                 |      |      |      | 19970324 |     |      |      |     |  |
|      |            | W:   |         | AM,  |     |             |           | BB,  |                |                 |      |      |      |          |     | _    |      |     |  |
|      |            |      | IL,     | IS,  | JP, | KG,         | KR,       | KΖ,  | LC,            | LK,             | LR,  | LT,  | LV,  | MD,      | MG, | MK,  | MN,  | MX, |  |
|      |            |      | NO,     | NZ,  | PL, | RO,         | RU,       | SG,  | SI,            | SK,             | ΤJ,  | TM,  | TR,  | TT,      | UA, | US,  | UZ,  | VN, |  |
|      |            |      | YU,     | AM,  | ΑZ, | BY,         | KG,       | KΖ,  | MD,            | RU,             | ΤJ,  | TM   |      |          |     |      |      |     |  |
|      |            | RW:  | GH,     | KΕ,  | LS, | MW,         | SD,       | SZ,  | UG,            | ΑT,             | BE,  | CH,  | DE,  | DK,      | ES, | FI,  | FR,  | GB, |  |
|      |            |      | GR,     | ΙE,  | ΙT, | LU,         | MC,       | NL,  | PT,            | SE,             | BF,  | ВJ,  | CF,  | CG,      | CI, | CM,  | GΑ,  | GN, |  |
|      |            |      | ML,     | MR,  | ΝE, | SN,         | TD,       | ΤG   |                |                 |      |      |      |          |     |      |      |     |  |
|      | AU         | 9723 | 409     |      |     | Α           |           | 1997 | 1017           |                 | AU 1 | 997- | 2340 | 9        |     | 1    | 9970 | 324 |  |
| PRIC | RITY       | APP  | LN.     | INFO | .:  |             |           |      |                |                 | US 1 | 996- | 1421 | 7P       |     | P 1  | 9960 | 327 |  |
|      |            |      |         |      |     |             |           |      |                | 1               | GB 1 | 996- | 7512 |          |     | A 1  | 9960 | 411 |  |
|      |            |      |         |      |     |             |           |      |                | ,               | WO 1 | 997- | US46 | 31       | ,   | W 1  | 9970 | 324 |  |

ED Entered STN: 13 Oct 1997

AB Platelet aggregation is inhibited, in a patient in need thereof, by administering, for a period of time >24 h, a glycoprotein IIb/IIIa receptor antagonist in an amount sufficient to achieve a steady-state plasma level which provides ≥70 % inhibition of fibrinogen binding to the IIb/IIIa receptor. This treatment reduces the risk of acute coronary ischemic syndrome during angioplasty. It may be used in combination with treatments with other anticoagulants, thrombolytic agents, and platelet aggregation inhibitors. A suitable agent is tirofiban in an amount sufficient to maintain a plasma level of 40-60 ng/mL for 24-36 h following angioplasty, administered i.v. or orally.

IT 197392-29-3 197392-30-6 197392-31-7 197392-32-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for inhibiting platelet aggregation and clot formation)

RN 197392-29-3 HCAPLUS

CN L-Cysteinamide, N2-(1-iminoethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 197392-30-6 HCAPLUS

CN L-Valinamide, N2-(1-iminoethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L-  $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl-3-mercapto- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 197392-31-7 HCAPLUS

CN L-Valinamide, N2-(iminophenylmethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl-3-mercapto-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 197392-32-8 HCAPLUS

CN L-Cysteinamide, N2-(iminophenylmethyl)-L-lysyl-N-(3-mercapto-1-oxopropyl)glycyl-L- $\alpha$ -aspartyl-L-tryptophyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IC ICM A61K031-44

ICS A61K031-55; A61K031-395; A61K031-415; A61K031-445; A61K031-495

CC 1-8 (Pharmacology)

Section cross-reference(s): 63

IT 144494-65-5, Tirofiban 155415-08-0 169237-80-3 197392-29-3
197392-30-6 197392-31-7 197392-32-8
197392-33-9 197392-34-0 197392-35-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(method for inhibiting platelet aggregation and clot formation)

ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:172491 HCAPLUS Full-text

DOCUMENT NUMBER: 108:172491

TITLE: Preparation of superplasticizer additive for concrete INVENTOR(S): Gusatu, Nicolae; Maurer, Ewald Viliam; Bab, Corneliu Ion; Jebelean, Eugen; Ilca, Anita Ileana; Marinescu,

Vasile; Koreck, Ioan Antoniu

PATENT ASSIGNEE(S): Intreprinderea de Detergenti, Timisoara, Rom.

SOURCE: Rom., 3 pp. CODEN: RUXXA3

Patent.

DOCUMENT TYPE: LANGUAGE: Romanian

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
|                        |      |          |                 |          |
| RO 91423               | B1   | 19870430 | RO 1985-117760  | 19850226 |
| PRIORITY APPLN. INFO.: |      |          | RO 1985-117760  | 19850226 |

Entered STN: 13 May 1988

The superplasticizer for concrete consists of 25-50% of a mixture containing 1 AΒ mol H2NCH2CH2NHCH2CH2N[COCH2CH(SO3Na)CO2Na]CH2CH2NHCOCH2CH(SO3Na)CO2Na or H2NCH2CH2N [COCH2 (SO3Na) CO2Na] CH2CH2N [COCH2CH (SO3Na) CO2Na] CH2CH2NHCOCH2CH (S O3Na)CO2Na and 1-2 mol ROOCCH2CH(SO3Na)CO2Na (where R = C4-8 alkyl) and 50-75% water. Triethylenetetramine (I) is reacted with .apprx.0.5 h with monoester of maleic acid and C4-8 alc. at a mol. ratio of 1:(1-2) and  $50-60^{\circ}$ . The reaction product is treated .apprx.1 h with maleic anhydride at a I/maleic anhydride mol ratio of 1:(2-3) at  $90-100^{\circ}$ , and the obtained product is treated 1-2 h with a Na2SO3 solution at a I/Na2SO3 mol ratio of 1:(2-4) at 60-70° to give the title superplasticizer. Thus, I 146 g was reacted 0.5 h with 2ethylhexyl monoester of maleic acid  $456~\mathrm{g}$  at  $50-60^{\circ}$ , and maleic anhydride 196g was added. The exothermic reaction was completed in 1 h at  $90-100^{\circ}$ . Then, 1300 g water was added, the reaction mixture was cooled to  $60-70^{\circ}$ , 504 g Na2SO3 was added with stirring, and the reaction was continued 1-2 h at 60-70°. The reaction was finished when the Na2SO3 content decreased below 0.5%.

113900-54-2 ΤТ

RL: USES (Uses)

(superplasticizers, for concrete)

RN 113900-54-2 HCAPLUS

CN Butanoic acid, 4-[[2-(2-aminoethyl)(3-carboxy-1-oxo-3sulfopropyl)amino]ethyl][2-[(3-carboxy-1-oxo-3sulfopropyl)amino]ethyl]amino]-4-oxo-2-sulfo-, hexasodium salt (9CI) INDEX NAME)

●6 Na

IC ICM C04B024-02 ICS C04B026-20

CC 58-2 (Cement, Concrete, and Related Building Materials)

IT 108-31-6D, reaction products with ethylhexyl maleate and triethylenetetramine, sulfonated, sodium salts 112-24-3D, reaction products with ethylhexyl maleate and maleic anhydride, sulfonated, sodium salts 7423-42-9D, 2-Ethylhexyl maleate, reaction products with maleic anhydride and triethylenetetramine, sulfonated, sodium salts 113900-54-2 113900-55-3

RL: USES (Uses)

(superplasticizers, for concrete)

L9 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:618079 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 107:218079

TITLE: Preparation of vasopressin antagonists for treatment

of hypertension, congestive heart failure, and hepatic

cirrhosis

INVENTOR(S): Ali, Fadia Elfehail; Marshall, Garland Ross; Huffman,

William Francis; Moore, Michael Lee

PATENT ASSIGNEE(S): SmithKline Beckman Corp., USA

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

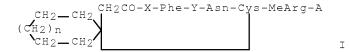
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.     | . KIN          | ID DATE     | APPLICATION NO.     |    | DATE     |
|----------------|----------------|-------------|---------------------|----|----------|
|                |                |             |                     |    |          |
| EP 225109      | A2             | 19870610    | EP 1986-308981      |    | 19861118 |
| EP 225109      | A3             | 19890607    | •                   |    |          |
| R: A:          | Γ, BE, CH, DE, | ES, FR, GB, | GR, IT, LI, LU, NL, | SE |          |
| US 4687758     | 3 A            | 19870818    | US 1985-799718      |    | 19851119 |
| ZA 8608690     | ) A            | 19870826    | ZA 1986-8690        |    | 19861117 |
| JP 6215529     | 98 A           | 19870710    | JP 1986-275088      |    | 19861118 |
| DK 8605539     | 9 A            | 19870520    | DK 1986-5539        |    | 19861119 |
| AU 8665383     | 3 A            | 19870521    | AU 1986-65383       |    | 19861119 |
| AU 595258      | B2             | 19900329    | r                   |    |          |
| PRIORITY APPLN | . INFO.:       |             | US 1985-799718      | A  | 19851119 |

ED Entered STN: 12 Dec 1987

GΙ



The title compds. [I; A = NH2, OH, Gly-OH, Gly-NH2, or a salt, ester, or N-alkylamide thereof; X = D or L-Tyr, Tyr(alkyl), Ile, Phe, Phe(alkyl); Y = Val, Abu; Abu =  $\alpha$ -aminobutyric acid; n = 0, 1] are vasopressin antagonists and are useful for treatment of hypertension, congestive heart failure, and hepatic cirrhosis. I (A = NH2, X = D-Tyr(Et), Y = Val, n = 1) (II) was prepared by

the solid-phase method on benzhydrylamine resin using tert-butoxycarbonyl-protected amino acids followed by resin cleavage using HF and disulfide bond formation using K3Fe(CN)6 in aqueous HOAc. II at 24.5  $\mu g/kg$  in rats reduced urine osmolality to 300 m-Osmoles/kg.

IT 111230-81-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and disulfide bond formation of, in preparation of vasopressin antagonist)

RN 111230-81-0 HCAPLUS

CN L-Arginine, N2-[N-[N2-[N-[N-[O-ethyl-N-[(1-mercaptocyclohexyl)acetyl]-L-tyrosyl]-L-phenylalanyl]-L-valyl]-L-asparaginyl]-L-cysteinyl]-N2-methyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

IC ICM C07K007-06

ICS C07K007-16; A61K037-64

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1

IT 111230-78-5P 111230-79-6P 111230-81-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and disulfide bond formation of, in preparation of vasopressin antagonist)

L9 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:499253 HCAPLUS Full-text

DOCUMENT NUMBER: 107:99253

TITLE: A process for the froth-flotation of a phosphate

mineral, and a reagent intended for use in the process  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

INVENTOR(S): Weckman, Anders; Anders, Weckman; Kari, Esko Tapio;

Esko, Tapio Kari; Aaltonen, Jarmo; Jarmo, Aaltonen

PATENT ASSIGNEE(S): Kemira Oy, Finland SOURCE: S. African, 28 pp.

CODEN: SFXXAB

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND  | DATE     | APPLICATION NO. |   | DATE     |
|------------------------|-------|----------|-----------------|---|----------|
| ZA 8602450             | <br>A | 19861126 | ZA 1986-2450    |   | 19860403 |
| FI 8403992             | A     | 19860412 | FI 1984-3992    |   | 19841011 |
| FI 8503942             | A     | 19860412 | FI 1985-3942    |   | 19851010 |
| FI 72899               | В     | 19870430 |                 |   |          |
| FI 72899               | С     | 19870810 |                 |   |          |
| AU 8655646             | A     | 19870416 | AU 1986-55646   |   | 19860404 |
| AU 594948              | B2    | 19900322 |                 |   |          |
| IN 167219              | A1    | 19900922 | IN 1986-MA266   |   | 19860410 |
| CN 86102467            | A     | 19870408 | CN 1986-102467  |   | 19860411 |
| CN 1009345             | В     | 19900829 |                 |   |          |
| BR 8601645             | A     | 19870602 | BR 1986-1645    |   | 19860411 |
| US 4755285             | A     | 19880705 | US 1986-850814  |   | 19860411 |
| SU 1480754             | A3    | 19890515 | SU 1986-4027345 |   | 19860411 |
| PRIORITY APPLN. INFO.: |       |          | FI 1985-3942    | A | 19851010 |
|                        |       |          | FI 1984-3992    | А | 19841011 |

ED Entered STN: 19 Sep 1987

The title process, especially suitable for phosphate-carbonate ores, employs a selective reagent of general formula (HO2CXCO)m[N(R1)YCO]nB (X = CH:CH, C(NRR3)HCH2, or C(SO3H)HCH2; Y = C(CO2H)HCH2 or CH(CH2CO2H); n = 0-40; m = 0, 1; B = NRR2 or a cyclic group; R = H, R3 or a cyclic group; R1-3 = C1-30 hydrocarbyl). An ore containing fluorapatite 9.6, carbonates 9.0%, and balance silicate, was crushed, and mixed with water to give a slurry containing  $36.3\% < 74-\mu$  material. A compound of formula HO2CCH:CHCO[N(R4)C(CO2H)HCH2CO]10NR4H (R4 = C3H6OC8H17) was added at 200 g/ton to the slurry, and, in 4 flotation steps, apatite concentrate was obtained in 93.2% yield, containing 30.6% P2O5, vs. 4.0% in the original ore.

IT 110008-34-9D, C16-18-alkyl derivs.

RL: USES (Uses)

(flotation agent, in phosphate ore concentration)

RN 110008-34-9 HCAPLUS

CN Butanoic acid, 4-[[2-amino-1-(carboxymethyl)-2-oxoethyl]octylamino]-4-oxo-2-sulfo-, monosodium salt (9CI) (CA INDEX NAME)

● Na

IC ICM B03D

CC 49-9 (Industrial Inorganic Chemicals)

IT 541-59-3D, C16-18-alkyl derivs. 4452-01-1D, C16-18-alkyl derivs. 60387-06-6 93804-04-7 100581-97-3 110008-24-7D, C16-18-alkyl derivs. 110008-25-8D, C16-18-alkyl derivs. 110008-26-9D, C16-18-alkyl derivs. 110008-27-0 110008-28-1 110008-29-2 110008-30-5 110008-31-6 110008-32-7 110008-33-8 110008-34-9D, C16-18-alkyl derivs. 110018-29-6 110018-30-9 110022-67-8 110041-94-6 110044-20-7D, maleoyl-terminated 110044-21-8D, maleoyl-terminated 110118-98-4

RL: USES (Uses)
(flotation agent, in phosphate ore concentration)

L9 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:110168 HCAPLUS Full-text

DOCUMENT NUMBER: 104:110168

ORIGINAL REFERENCE NO.: 104:17481a,17484a

TITLE: N-(benzothiadiazinylalkyl)glycines for treating

hypertension

INVENTOR(S): Suh, John T.; Piwinski, John J.; Jones, Howard; Neiss,

Edward S.

PATENT ASSIGNEE(S): USV Pharmaceutical Corp., USA

SOURCE: Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|       | PATENT NO. |         |        |      | KINI | )    | DATE   | DATE . |      |       | LICATION NO |                 | DATE |   |          |
|-------|------------|---------|--------|------|------|------|--------|--------|------|-------|-------------|-----------------|------|---|----------|
|       | EP         | 15375   | <br>55 |      |      | A2   | _      | 1985   | 0904 | EF    |             | <br>1985-102266 |      | - | 19850228 |
|       | ΕP         | 15375   | 55     |      |      | А3   |        | 1986   | 0416 |       |             |                 |      |   |          |
|       |            | R:      | AT,    | BE,  | CH,  | DE,  | FR,    | GB,    | ΙΤ,  | LI, I | JU,         | , NL, SE        |      |   |          |
|       | US         | 45769   | 941    |      |      | Α    |        | 1986   | 0318 | US    | 5 .         | 1984-584576     |      |   | 19840229 |
|       | AU         | 85392   | 284    |      |      | Α    |        | 1985   | 0905 | ΑU    | J :         | 1985-39284      |      |   | 19850228 |
|       | AU         | 57635   | 50     |      |      | В2   |        | 1988   | 0825 |       |             |                 |      |   |          |
|       | JΡ         | 60208   | 3955   |      |      | Α    |        | 1985   | 1021 | JF    | 2           | 1985-37790      |      |   | 19850228 |
|       | ES         | 54134   | 11     |      |      | A1   |        | 1985   | 1216 | ES    | 3 .         | 1985-541341     |      |   | 19850228 |
|       | US         | 46969   | 39     |      |      | Α    |        | 1987   | 0929 | US    | 5 .         | 1985-802921     |      |   | 19851129 |
| PRIOF | RITY       | APPI    | N. :   | INFO | .:   |      |        |        |      | US    | 3 3         | 1984-584576     |      | Α | 19840229 |
| OTHER | 00         | NIDOD ( | (0)    |      |      | MADI | 7 7 TT | 104.   | 1101 | - 0   |             |                 |      |   |          |

OTHER SOURCE(S): MARPAT 104:110168

ED Entered STN: 05 Apr 1986

GΙ

AB Amino acids RS(CH2)nCR1R2CON(Z1R6)CR3R4COR5 (R = H, acyl; R1-R4 = H, hydrocarbyl, aminoalkyl; R5 = OH, esterified OH, amino; Z1 = alkylene, heteroalkylene; R6 = aryl, fused polycyclic aryl, heteroaryl, benzoheterocyclyl; n = 0-3; ), useful as antihypertensives, were prepared

(Benzothiadiazinylmethyl)glycine I·HCl (R7 = H) was treated with AcsCH2CHMeCO2H, N,N'-carbonyldiimidazole, and Et3N to give I (R7 = AcsCH2CHMeCO).

IT 100821-55-4P 100821-62-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as antihypertensive)

RN 100821-55-4 HCAPLUS

CN Glycine, N-[3-[7-(aminosulfonyl)-6-chloro-3,4-dihydro-1,1-dioxido-2H-1,2,4-benzothiadiazin-3-yl]propyl]-N-(3-mercapto-2-methyl-1-oxopropyl)- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & CH_2-CO_2H \\ \hline \\ H_2N-S & MH \\ \hline \end{array}$$

RN 100821-62-3 HCAPLUS

CN Glycine, N-[[7-(aminosulfonyl)-6-chloro-3,4-dihydro-1,1-dioxido-2H-1,2,4-benzothiadiazin-3-yl]methyl]-N-(3-mercapto-2-methyl-1-oxopropyl)- (CA INDEX NAME)

IC ICM C07D285-30

CCS C07D285-14; C07D239-90; C07D231-56; A61K031-54; A61K031-41; A61K031-505

ICA C07C101-04

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 28

IT 100821-52-1P 100821-53-2P 100821-55-4P 100821-56-5P

100821-57-6P 100821-58-7P 100821-59-8P 100821-60-1P 100821-61-2P

100821-62-3P 100843-89-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as antihypertensive)

#### \*\*\*\* SEARCH HISTORY \*\*\*\*

#### => d his nofile

(FILE 'HOME' ENTERED AT 16:05:55 ON 19 MAR 2008) FILE 'HCAPLUS' ENTERED AT 16:06:04 ON 19 MAR 2008 1 SEA ABB=ON PLU=ON US20060160086/PN L1D IBIB AB IT SC FILE 'REGISTRY' ENTERED AT 16:57:47 ON 19 MAR 2008 L2STRUCTURE UPLOADED L3 3 SEA SSS SAM L2 D SCAN L464 SEA SSS FUL L2 SAVE TEMP L4 MUM000REGL1/A FILE 'STNGUIDE' ENTERED AT 16:59:52 ON 19 MAR 2008 FILE 'REGISTRY' ENTERED AT 17:04:52 ON 19 MAR 2008 L5 STRUCTURE UPLOADED STRUCTURE UPLOADED 1.6 L72 SEA SUB=L4 SSS SAM (L5 OR L6) D SCAN L8 14 SEA SUB=L4 SSS FUL (L5 OR L6) D SCAN SAVE TEMP L8 MUM000REGL34/A FILE 'HCAPLUS' ENTERED AT 17:08:33 ON 19 MAR 2008 L9 8 SEA ABB=ON PLU=ON L8 1 SEA ABB=ON PLU=ON L9 AND L1 L10 D SCAN L9 TI HIT 35 SEA ABB=ON PLU=ON L4 L11 1 SEA ABB=ON PLU=ON L11 AND 80/SC,SX D SCAN SAVE TEMP L9 MUM000HCAP/A 51 SEA ABB=ON PLU=ON VOLLAND H?/AU L13 190 SEA ABB=ON PLU=ON CREMINON C?/AU L14 L15 3 SEA ABB=ON PLU=ON NEUBURGER L?/AU L16 274 SEA ABB=ON PLU=ON GRASSI J?/AU L17 1 SEA ABB=ON PLU=ON (((L13 OR L14 OR L15 OR L16)) AND L9) OR (L1 AND L9) FILE 'REGISTRY' ENTERED AT 17:14:13 ON 19 MAR 2008 L18 0 SEA ABB=ON PLU=ON L4 AND (BIOSIS/LC OR BIOTECHNO/LC OR SCISEARCH/LC) FILE 'BIOSIS, BIOTECHNO, PASCAL, SCISEARCH' ENTERED AT 17:15:03 ON 19 MAR 2008 40 SEA ABB=ON PLU=ON L13 AND ((L14 OR L15 OR L16)) L19 239 SEA ABB=ON PLU=ON L14 AND (L15 OR L16) L20 L21 2 SEA ABB=ON PLU=ON L15 AND L16 L22 250 SEA ABB=ON PLU=ON (L19 OR L20 OR L21) L23 42 SEA ABB=ON PLU=ON L22 AND (ANALYT? OR TRIFUNCT? OR DETECT? REAGENT?) L24 0 SEA ABB=ON PLU=ON L23 AND (CONTINU? DETECT?)

D TI AU L21 1-2

| L25 | 2 SEA ABB=ON PLU=ON L23 AND FLUORES?                                     |
|-----|--|
| L26 | 11 SEA ABB=ON PLU=ON L23 AND SOLID PHASE?                                |
|     | D L26 TI AU 1-5  |
| L27 | 11 SEA ABB=ON PLU=ON L25 OR L26  |
|     | SAVE TEMP L27 MUM000MULTIN/A   |
|     |  |
|     | FILE 'STNGUIDE' ENTERED AT 17:20:25 ON 19 MAR 2008                       |
|     | D OUE L17  |
|     |  |
|     | FILE 'HCAPLUS, BIOSIS, BIOTECHNO, PASCAL, SCISEARCH' ENTERED AT 17:21:21 |
|     | ON 19 MAR 2008   |
| L28 | 9 DUP REM L17 L27 (3 DUPLICATES REMOVED)                                 |
|     | ANSWER '1' FROM FILE HCAPLUS   |
|     | ANSWERS '2-7' FROM FILE BIOSIS   |
|     | ANSWERS '8-9' FROM FILE PASCAL   |
|     | D L28 1 IBIB ABS HITSTR  |
|     | D L28 IBIB AB 2-9  |
|     | D QUE L9   |
|     | ~  |
|     | D L9 1-8 IBIB ED ABS HITSTR HITIND                                       |